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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,895	08/26/2003	John Blumenthal	4605-001	3576

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EXAMINER

WRIGHT, ANDREW D

ART UNIT	PAPER NUMBER
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3617

DATE MAILED: 05/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/647,895

Applicant(s)

BLUMENTHAL ET AL.

Examiner

Andrew Wright

Art Unit

3617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2005.
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-37 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☒ Claim(s) 18, 19 and 30 is/are allowed.
 6) ☒ Claim(s) 15-17, 20, 21 and 31-34 is/are rejected.
 7) ☒ Claim(s) 22-29 and 35-37 is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____
 5) ☐ Notice of Informal Patent Application (PTO-152)
 6) ☐ Other: _____

DETAILED ACTION

Information Disclosure Statement

1. In the response dated 2/23/05, applicant provided copies of and requested consideration of the "Ice Eater" and Powerhouse" publications that were cited in the IDS of 1/8/04 but not considered. The submission is not in compliance with 37 CFR 1.97(c) and therefore the information has not been considered. The date of any re-submission of any item of information contained in the information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609 ¶ C(1). Since the resubmission was filed after the first Office Action but before the close of prosecution, the resubmission must be accompanied by either a 37 CFR 1.97(e) statement or a 37 CFR 1.17(p) fee. The re-submission was not accompanied by either and therefore is not in compliance with 37 CFR 1.97(c). The re-submission has been placed in the application file, but the information referred to therein has not been considered.

Drawings

2. The drawing objection of Paragraph 5 of the previous Office Action is withdrawn.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 15, 16, and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Springston (US 4,247,261). Springston shows a water pumping arrangement (20) comprising a sheath (22) and propeller (28). The sheath has an inlet (26) at the bottom of the sheath and an outlet (24) at the top of the sheath. The propeller draws water into the inlet and pushes it out of the outlet. The outlet is positioned below the surface of the body of water (fig 1). Holes (50) add to the effective inlet area, such that through conservation of mass and momentum the outlet (24) water velocity is necessarily higher than the inlet (26) water velocity. The turbulent flow and acceleration due to the nozzle effect is capable of causing air bubbles to be induced in the water above the outlet. Springston teaches that the sheath can be suspended from a boat.

5. It is noted that claim 15 recites an intended use: "arranged for causing..." in lines 3-9. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). The sheath could be used while the craft is moving forward.

6. Regarding claim 16, the propeller axis can be vertical (column 3, lines 1-4).

7. Regarding claim 34, Springston shows a vertically extending flexible connector (34) that holds the sheath. Springston teaches that the sheath can be suspended from a boat. So the connector is necessarily between the boat and sheath.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 15, 17, 20, 21, and 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Springston (US 4,247,261). Springston discloses the elements of claim 15. Regarding claim 17, Springston does not disclose a plurality of sheaths and propellers. However, it is within the range of knowledge of the skilled artisan to use more than one sheath and propeller. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a plurality of the pumping arrangements (20) shown by Springston. The motivation would be to de-ice a larger area of the water surface.

10. Regarding claim 20, Springston teaches that the device, in its operation, is suspended at a desired depth, e.g. 3 or 4 feet below the water surface. This teaching is not limiting and does not exclude shallower depths. It would be within the range of knowledge of the skilled artisan to suspend the outlet at any desired depth below the surface. Furthermore, in the transient state of lowering the pumping arrangement (20) from the surface to the desired depth, the outlet will necessarily pass through the 4 to 6

inch depth. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to position the outlet about 4 to 6 inches below the surface, at least temporarily, for the purpose of lowering the pumping arrangement from the surface to the desired depth.

11. Similarly for claim 21, in lowering the pumping arrangement from the surface to the desired depth, the inlet will pass through a depth of 24 to 30 inches. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to position the inlet about 24 to 30 inches below the surface, at least temporarily, for the purpose of lowering the pumping arrangement from the surface to the desired depth.

12. Regarding claim 31, Springston teaches that the pumping arrangement can be suspended from a boat but does not specify what type of boat. Springston further teaches that the pumping arrangement is useful in marinas and navigable waterways. The catamaran is a common and well known type of boat that is found in both marinas and navigable waterways. It would be obvious for a catamaran owner to use the Springston arrangement for the purpose of keeping ice off of his boat. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the pumping arrangement with a catamaran. The motivation would be to de-ice the water around the catamaran.

13. Regarding claim 32, Springston discloses that the sheath is suspended from a boat by lines (34, 36). Lines (32, 34) are a structure carrying the sheath. Springston does not disclose sheath is suspended forward of the forward end of the boat. It is

within the range of knowledge of the skilled artisan to suspend the sheath at any location around the perimeter of the boat. The motivation is to remove ice from a particular location. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to suspend the sheath from the front of the boat, forward of the bow of the boat. The motivation would be to de-ice the water around the bow.

14. Regarding claim 33, the lines are flexible and can pivot relative to the longitudinal axis of the boat.

Allowable Subject Matter

15. Claims 18, 19, and 30 are allowed.

16. Claims 22-29 and 35-37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

17. Applicant's arguments with respect to claims 15-17, 20, 21, and 31-34 have been considered but are moot in view of the new ground(s) of rejection. The arguments will be addressed, however, for the purpose of advancing prosecution.

18. Applicant argues that the added limitation "while the watercraft is moving forward in a body of water" defines the invention over that of Springston. This is not persuasive. The added limitation is in the middle of an intended use (or functional) recitation. The prior art reads on the claims if it is theoretically capable of performing the intended use or function. A recitation of the intended use of the claimed invention must result in a

structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). In this case, the sheath could be used while the craft is moving forward.

Conclusion

19. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

20. Any inquiry concerning this communication should be directed to examiner Andrew D. Wright at telephone number 571-272-6690. The examiner can normally be reached Monday-Friday from 9:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, S. Joe Morano, can be reached at 571-272-6684. The fax number for official communications is 703-872-9306. The fax number directly to the examiner for unofficial communications is 571-273-6690.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andrew D. Wright
Patent Examiner
Art Unit 3617

Ar 5/10/05

**ANDREW D. WRIGHT
PRIMARY EXAMINER**